

REMARKS/ARGUMENTS

Status Of Application

Claims 1-54 were pending in the application. By this Amendment, claim 5 is cancelled and claims 55-71 are added. The status of the claims is as follows:

Claim 5 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, 34, 47, and 48 are rejected under 35 U.S.C. § 103(a) as being unpatentable over “Cholesteric LCDs show images after power is turned off” to Powell (“Powell”) in view of U.S. Patent No. 4,802,739 to Iwamoto (“Iwamoto”) and U.S. Patent No. 5,926,173 to Moon (“Moon”).

Claims 3, 4, 7, 21, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of U.S. Patent No. 6,115,033 to Choi (“Choi”).

Claims 3, 4, 7, 21, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon.

Claims 19, 27, 35, 37, 38, 40, 41, 43, 44, 46, 49, and 51-54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon.

Claims 25 and 50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon and U.S. Patent No. 5,912,653 to Fitch (“Fitch”).

Claim 33 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Iwamoto and Moon as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 above, and further in view of Fitch.

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Claims 36, 39, 42, and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 above, and further in view of Iwamoto.

Claim 5 has been cancelled.

Claims 55-71 have been added.

Claim Amendments

Claims 1, 3, 15, 16, 19, 20, 25, 27, 28, 35, 38, 41, and 44 have been amended to incorporate additional disclosed features. The new limitation of an “operation section” is a generic input device and includes, for example, touch panels 83 and 84 and operation keys 204 as disclosed on page 25, line 10 through page 27, line 7 and illustrated in FIGs. 15 and 16. Thus, these amendments do not introduce any new matter.

35 U.S.C. § 112 Rejection

The rejection of claim 5 under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, has been rendered moot by the cancellation of claim 5.

35 U.S.C. § 103(a) Rejections

The rejection of claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, 34, 47, and 48 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Iwamoto and Moon, is respectfully traversed based on the following.

Claim 1 includes the limitation of an operation section that allows a user to make an input to the liquid crystal display device. Example inputs include paging forward or backward through a displayed document as disclosed at page 27, lines 15-18 of the present application. Claim 1 further includes the limitation of a controller “which reactivates the

inactivated part of the power supply circuit upon receiving an input from the operation section.” The net result is that the liquid crystal display device remains partially inactivated until an input is received from the operation section, thereby reducing power consumption while retaining a displayed image through the use of a liquid crystal display having a memory effect.

In contrast, the combination of Powell, Iwamoto, and Moon does not disclose or suggest a device having an operation section to reactivate a liquid crystal display device. In particular, Powell does not disclose or suggest any type of operation section with which a user can make an input or a controller for reactivating an inactivated part of a power supply circuit upon receiving an input from the operation section. Further, Iwamoto does not disclose or suggest any type of operation section with which a user can make an input. While Iwamoto discloses the use of many switches (*e.g.*, SW1-SW5 in FIG. 1), these switches are not user accessible, but rather are under the control of the liquid crystal display control device itself. Without an operation section, Iwamoto cannot include a controller for reactivating an inactivated part of a power supply circuit upon receiving an input from the operation section. This is acknowledged in the Office Action itself in which the Examiner notes Powell does not disclose a method for turning the power on and off in the display device. Lastly, Moon does not disclose or suggest any type of operation section with which a user can make an input. Moon discloses a power on/off method based upon vertical synchronizing signals VSYNC, a starting signal STV, and a carry signal C-OUT as disclosed starting at column 4, line 47 and ending at column 5, line 49. In summary, Moon’s power saving mode is based upon the levels of these three internally generated, periodic, and continuous signals. Moon does not disclose or suggest reactivating an inactivated part of a power supply circuit based upon receiving a user input from an operation section. Thus, the combination of Powell, Iwamoto, and Moon does not disclose or suggest each limitation of claim 1, and therefore cannot render obvious the invention of claim 1.

Claims 2, 6, 8-14, and 47 depend from claim 1. As claim 1 is considered nonobvious over the combination of Powell, Iwamoto, and Moon, claims 2, 6, 8-14 and 47 are also considered nonobvious for at least the same reasons.

Claim 15 has been amended in a manner similar to claim 1 in that claim 15 includes the limitation of an operation section and a controller that reactivates the power supply circuit upon receiving an input from the operation section. As discussed above, the combination of Powell, Iwamoto, and Moon does not disclose or suggest an operation section or a controller that operates in this manner. Thus, the combination of Powell, Iwamoto, and Moon fails to render obvious the invention of claim 15 for at least the same reasons. Claims 23, 24, 26, 31, 34, and 48 depend from claim 15. As claim 15 is considered nonobvious over the combination of Powell, Iwamoto, and Moon, claims 23, 24, 26, 31, 34, and 48 are also considered nonobvious for at least the same reasons.

The method of claim 16 has been amended to include the limitation of "in response to an input made with an operation section by a user, reactivating the inactivated part of the power supply circuit." As discussed above, the combination of Powell, Iwamoto, and Moon does not disclose or suggest receiving user input via an operation section or reactivating the inactivated part of a power supply circuit based upon this user input. Thus, the combination of Powell, Iwamoto, and Moon fails to render obvious the method of claim 16 for at least the same reasons. Claims 17, 18, and 32 depend from claim 16. As claim 16 is considered nonobvious over the combination of Powell, Iwamoto, and Moon, claims 17, 18, and 32 are also considered nonobvious for at least the same reasons.

The method of claim 20 has been amended in a manner similar to claim 16 in that claim 20 includes the limitation of "in response to an input made with an operation section by a user, reactivating the inactivated part of the power supply circuit and the inactivated part of the internal circuit of the data processing unit." As discussed above, the combination of Powell, Iwamoto, and Moon does not disclose or suggest receiving user input via an operation section or reactivating the inactivated parts of a power supply

circuit and a data processing unit based upon this user input. Thus, the combination of Powell, Iwamoto, and Moon fails to render obvious the method of claim 20 for at least the same reasons.

Claim 28 has been amended in a manner similar to claim 1 in that claim 28 includes the limitation of an operation section and a controller that reactivates the power supply circuit and/or the data processing unit upon receiving an input from the operation section. As discussed above, the combination of Powell, Iwamoto, and Moon does not disclose or suggest an operation section or a controller that operates in this manner. Thus, the combination of Powell, Iwamoto, and Moon fails to render obvious the invention of claim 28 for at least the same reasons. Claims 29 and 30 depend from claim 28. As claim 28 is considered nonobvious over the combination of Powell, Iwamoto, and Moon, claims 29 and 30 are also considered nonobvious for at least the same reasons

Accordingly, it is respectfully requested that the rejection of claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, 34, 47, and 48 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Iwamoto and Moon, be reconsidered and withdrawn.

The rejection of claims 3, 4, 7, 21, and 22 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Choi, is respectfully traversed based on the following.

As noted above with respect to claim 1, Powell does not disclose or suggest an operation section with which a user makes an input. For this reason, Powell necessarily cannot disclose or suggest a controller that reactivates the inactivated part of the power supply upon receiving an input from the operation section. Choi similarly does not disclose or suggest a controller that reactivates the inactivated part of a power supply upon receiving an input from an operation section. While Choi may or may not disclose a controlling means for reactivating a power supply, it does not do so based upon receiving an input from an operation section. In particular, Choi discloses a soft power key 21 that controls reactivating a power supply via a central processor. The soft power key 21 is the main power key that turns on and off the entire video display device, *see* column 7, lines

4-6. It should be noted that the operation section found in the limitation of claim 1 would not cover a simple on/off power switch. The disclosed operation section as noted on page 25, line 10 through page 27, line 7 and illustrated in FIGs. 15 and 16 is directed to control of the display, for example causing the display to page forward or backward. Page 18, line 18 separately discloses operation keys 22 and a power switch 23 indicating that the power switch is not included within the operation section. Therefore, the combination of Powell and Choi fails to disclose or suggest each element of claim 1 and cannot render claim 1 obvious.

Claim 3, similar to claim 1, includes the limitations of an operation section and a controller that reactivates the inactivated part of at least one central processing unit upon receiving an input from the operation section. As discussed above, the combination of Powell and Choi fails to disclose or suggest an operation section and a controller that reactivates a portion of a central processor upon receiving an input from the operation section. Because the combination of Powell and Choi fails to disclose or suggest each limitation of claim 3, the combination of Powell and Choi cannot render obvious the invention of claim 3.

Claims 4, 7, 21, and 22 depend, either directly or indirectly from claim 3. As claim 3 is nonobvious over the combination of Powell and Choi, claims 4, 7, 21, and 22 are considered nonobvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 3, 4, 7, 21, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Choi, be reconsidered and withdrawn.

The rejection of claims 3, 4, 7, 21, and 22 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Moon, is respectfully traversed based on the following.

As noted above with respect to claim 1, Powell does not disclose or suggest an operation section with which a user makes an input. For this reason, Powell necessarily cannot disclose or suggest a controller that reactivates the inactivated part of the power supply upon receiving an input from the operation section. Moon similarly does not disclose or suggest a controller that reactivates the inactivated part of a power supply upon receiving an input from an operation section. Moon does not disclose any type of operation section for receiving input from a user, and thus cannot disclose or suggest a controller that reactivates the inactivated part of a power supply upon receiving an input from the operation section. Therefore, the combination of Powell and Moon fails to disclose or suggest each element of claim 1 and cannot render claim 1 obvious.

Claim 3, similar to claim 1, includes the limitations of an operation section and a controller that reactivates the inactivated part of at least one central processing unit upon receiving an input from the operation section. As discussed above, the combination of Powell and Moon fails to disclose or suggest an operation section and a controller that reactivates a portion of a central processor upon receiving an input from the operation section. Because the combination of Powell and Moon fails to disclose or suggest each limitation of claim 3, the combination of Powell and Moon cannot render obvious the invention of claim 3.

Claims 4, 7, 21, and 22 depend, either directly or indirectly from claim 3. As claim 3 is nonobvious over the combination of Powell and Moon, claims 4, 7, 21, and 22 are considered nonobvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 3, 4, 7, 21, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon, be reconsidered and withdrawn.

The rejection of claims 19, 27, 35, 37, 38, 40, 41, 43, 44, 46, 49, and 51-54 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Moon, is respectfully traversed based on the following.

Claims 19, 27, 35, 38, 41, and 44, similar to claim 1, includes the limitations of an operation section and a controller that reactivates the inactivated parts of power supply circuits, and/or data processing units upon receiving an input from the operation section. As discussed above, the combination of Powell and Moon fails to disclose or suggest an operation section and a controller that reactivates a portion of both a power supply circuit and a data processing unit upon receiving an input from the operation section. Because the combination of Powell and Moon fails to disclose or suggest each limitation of claims 19, 27, 35, 38, 41, and 44, the combination of Powell and Moon cannot render obvious the inventions of claims 19, 27, 35, 38, 41, and 44.

Claims 37, 43, 46, 49, 51-54 depend from claims 27, 35, 38, 41, and 44. As claims 27, 35, 38, 41, and 44 are nonobvious over the combination of Powell and Moon, claims 37, 43, 46, 49, 51-54 are considered nonobvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 19, 27, 35, 37, 38, 40, 41, 43, 44, 46, 49, and 51-54 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon, be reconsidered and withdrawn.

The rejection of claims 25 and 50 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Moon and Fitch, is respectfully traversed based on the following.

As noted above, the combination of Powell and Moon does not disclose or suggest an operation section with which a user makes an input. For this reason, the combination of Powell and Moon necessarily cannot disclose or suggest a controller that reactivates the inactivated part of a power supply upon receiving an input from the operation section. Fitch discloses a flexible LCD device, but does not disclose or suggest a controller that reactivates the inactivated part of a power supply upon receiving an input from an operation section. In fact, Fitch does not appear to disclose or suggest deactivating any portion of the disclosed device and thus cannot reactivate a portion of the disclosed device. Therefore, the combination of Powell, Moon, and Fitch fails to disclose or suggest each element of claim 25 and cannot render claim 25 obvious.

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Claim 50 depends from claim 25. As claim 25 is nonobvious over the combination of Powell, Moon, and Fitch, claim 50 is considered nonobvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 25 and 50 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon and Fitch, be reconsidered and withdrawn.

The rejection of claim 33 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Iwamoto and Moon as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 above, and further in view of Fitch, is respectfully traversed based on the following.

Claim 33 depends from independent claim 15. As discussed above, the combination of Powell, Iwamoto, and Moon fails to render obvious the invention of claim 15, and thus claim 33 is nonobvious over the combination of Powell, Iwamoto, and Moon. As discuss directly above, Fitch discloses a flexible LCD device, but does not disclose or suggest deactivating any portion of the disclosed device and thus cannot reactivate a portion of the disclosed device. Thus, the combination of Powell, Iwamoto, Moon, and Fitch fails to render obvious the invention of claim 15.

Claim 33 depends from claim 15. As claim 15 is nonobvious over the combination of Powell, Iwamoto, Moon, and Fitch, claim 33 is considered nonobvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claim 33 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Iwamoto and Moon as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 above, and further in view of Fitch, be reconsidered and withdrawn.

The rejection of claims 36, 39, 42, and 45 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Moon as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 above, and further in view of Iwamoto, is respectfully traversed based on the following.

Claims 36, 39, 42, and 45 depend from claims 35, 38, 41, and 44. As discussed above, the combination of Powell and Moon fails to render obvious the inventions of claims 35, 38, 41, and 44, and thus claims 36, 39, 42, and 45 are nonobvious over the combination of Powell and Moon. As discussed above, Iwamoto does not disclose an operation section with which a user can make an input and thus cannot disclose or suggest reactivating a portion of the disclosed device based upon a user input. Thus, the combination of Powell, Moon, and Iwamoto fails to render obvious the inventions of claims 35, 38, 41, and 44.

Claims 36, 39, 42, and 45 depend from claims 35, 38, 41, and 44. As claims 35, 38, 41, and 44 are nonobvious over the combination of Powell, Moon, and Iwamoto, claims 36, 39, 42, and 45 are considered nonobvious for at least the same reasons.

Accordingly, it is respectfully requested that the rejection of claims 36, 39, 42, and 45 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Moon as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 above, and further in view of Iwamoto, be reconsidered and withdrawn.

New Claims

By this Amendment, new claims 55-71 are added. The limitation found in claims 55-67, that image writing is performed on the liquid crystal display in accordance with input from the operation section, is disclosed in the present application on page 25, lines 10-21. For this reason, claims 55-67 do not introduce new matter. The limitation of claim 68, page forward and page backward keys, is disclosed on page 25, lines 10-21. For this reason, claim 68 does not introduce new matter. The limitation of claim 69, that the

insertion of a memory card causes the controller to reactivate the power supply circuit, is disclosed on page 34, line 21 through page 35, line 2. For this reason, claim 69 does not introduce new matter. Claim 70 corresponds generally to claim 1, but performs image writing based upon the input from the operation section, not a write command.

Performing image writing based upon the input from the operation section, e.g., a paging command, is disclosed on page 25, lines 10-21. For this reason, claim 70 does not introduce new matter. The limitation of claim 71, that the display have a memory effect and is capable of displaying an image while at least part of the power supply circuit is deactivated is disclosed on page 28, lines 7-15. For this reason, claim 71 does not introduce new matter.

Claims 55-67 depend from claims 1, 3, 15, 16, 19, 20, 25, 27, 28, 35, 38, 41, and 44. As each of claims 1, 3, 15, 16, 19, 20, 25, 27, 28, 35, 38, 41, and 44 are nonobvious over the individual references and each asserted combination thereof, claims 55-67 are considered nonobvious for at least the same reasons.

Claims 68 and 69 depend from claim 1. As claim 1 is nonobvious over the individual references and each asserted combination thereof, claims 68 and 69 are considered nonobvious for at least the same reasons.

Claim 70 is similar to claim 1, but performs image writing based on input from the operation section rather than a write command. As this image writing is not part of how claim 1 is distinguished over the cited prior art, either individually or in various combinations, claim 70 is likewise considered distinguished and thus nonobvious over the cited prior art.

Claim 71 depends from claim 70. As claim 70 is nonobvious over the individual references and each asserted combination thereof, claim 71 is considered nonobvious for at least the same reasons.

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CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment increases the number of independent claims by 1 from 13 to 14 and increases the total number of claims by 16 from 54 to 70, but does not present any multiple dependency claims. Accordingly, a Response Transmittal and Fee Authorization form authorizing the amount of \$374.00 to be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260 is enclosed herewith in duplicate. However, if the Response Transmittal and Fee Authorization form is missing, insufficient, or otherwise inadequate, or if a fee, other than the issue fee, is required during the pendency of this application, please charge such fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

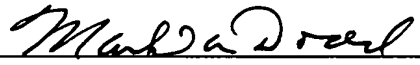
Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

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Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By: 
Mark A. Dodd
Reg. No. 45,729
Attorney for Applicants

MAD/lfb:jjk
SIDLEY AUSTIN BROWN & WOOD LLP
717 N. Harwood, Suite 3400
Dallas, Texas 75201
Direct: (214) 981-3481
Main: (214) 981-3300
Facsimile: (214) 981-3400
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